REMARKS/ARGUMENTS

Claims 14-20 are pending. Favorable reconsideration is respectfully requested.

The rejection of Claim 14 under 35 U.S.C. §112, first paragraph, for alleged lack of written description, as set forth at page 3 of the Official Action dated December 24, 2003, is believed to be obviated by the amendment submitted above. Claim 14 has been amended to remove the recitation that the "the desired gene is not a selectable marker gene." Accordingly, withdrawal of this ground of rejection is respectfully requested.

The rejection of the claims under 35 U.S.C. §112, first paragraph, for alleged lack of written description, as set forth at pages 4-5 of the Official Action dated December 24, 2003, is respectfully traversed.

Page 10 of the present specification provides a detailed description of plant hormone signal transduction genes which can be used as a selectable marker gene. In fact, several specific examples of such genes are provided. Just by providing the names of these genes provides the required structural and functional description of these sequences because, as noted in the specification, these sequences are known in the literature. In addition, the ability of these sequences to function as a selectable marker gene is an inherent property of the sequence itself.

Regarding combinations of plant hormone signal transduction genes and and plant hormone synthesis genes that function together as selectable marker genes, the speciation describes examples of both types of genes. In addition, the specification explicitly describes that those genes may be used together as selectable marker genes (see original Claim 4 at page 47). No evidence has been provided in support of the rejection that any combination of the disclosed genes could be used for the purpose of selectable markers.

Based on the foregoing, Applicants did have possession of the claimed invention at the time the present application was filed. Accordingly, withdrawal of this ground of rejection is respectfully requested.

The rejection of the claims under 35 U.S.C. §112, first paragraph, for alleged lack of enablement, as set forth at pages 5-8 of the Official Action dated December 24, 2003, is respectfully traversed.

The present specification provides a detailed description of how to make and use the claimed vector. As discussed above, the present specification provides a detailed description of plant hormone signal transduction genes at page 10, including several specific examples of such genes. The working Examples of the application at pages 27-45 provide specific details regarding how to make the claimed vector and use the same. Based on these teachings, one skilled in the art can readily prepare and use other vectors within the scope of the claims. The amount of experimentation would not be undue. Since the amount of experimentation necessary would not be undue, the claims are enabled.

Regarding combinations of plant hormone signal transduction genes and and plant hormone synthesis genes that function together as selectable marker genes, the speciation describes examples of both types of genes. In addition, the specification explicitly describes that those genes may be used together as selectable marker genes (see original Claim 4 at page 47). No evidence has been provided in support of the rejection that any combination of the disclosed genes could be used for the purpose of selectable markers. As noted by the Examiner, one combination of genes is explicitly taught in the specification. Using any other combination and verifying that the genes work using the procedures explicitly described would require only routine experimentation. Even if the Examiner is correct as alleged in the paragraph bridging pages 7-8 of the Official Action dated December 24, 2003, the fact is that one simply conducts an experiment with the appropriate combination and determines whether

it works or not. Using the procedures described in the present specification, such an experiment would be routine.

The Examiner has asserted that, since the "degradation" of endogenous chemical substances is well known to be essential to the maintenance of homeostasis in all biological systems, the existence of a "detoxification" mechanism against proteins that mediate plant hormone signal transduction would be essential.

However, the Examiner is confusing the "degradation" with the "detoxification." That is, the "degradation" means that a chemical substance is chemically changed to have a lower molecular weight, whereas the "detoxification" means that a chemical substance is chemically modified to thereby remove its toxicity. Accordingly, the "degradation" does not always involve the "detoxification," and in the same manner, the "detoxification" does not always involve the "degradation." Therefore, the above Examiner's assertion is incorrect on this point.

The plant hormone signal transduction gene used in the present invention expresses in plant cells and produces a protein which mediates the signal transduction of plant hormone. The protein produced mediates the signal transduction either directly or by "degradation." With respect to this point, one of ordinary skill in the art can easily understand that the protein is not subjected to "detoxification" in plant cells. As discussed in the response filed on January 7, 2002, the protein functions in the signal transduction pathway of plants, is indispensable for growth and differentiation of all plants, and is naturally exists in various types of plant cells.

Based on the foregoing, the claims satisfy the enablement requirement of 35 U.S.C. §112, first paragraph. Accordingly, withdrawal of this ground of rejection is respectfully requested.

The rejection of the claims under 35 U.S.C. §112, second paragraph, is believed to be obviated by the amendment submitted above. Claims 15 and 20 have been amended for clarity. Accordingly, withdrawal of this ground of rejection is respectfully requested.

Applicants submit that the present application is in condition for allowance. Early notice to this effect is earnestly solicited.

Respectfully submitted,

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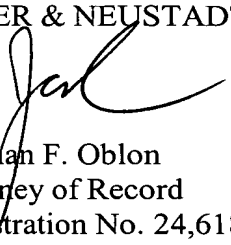

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